IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Inventors	:	**Richter et al.**
Serial No.	:	**09/575,080**
Filed	:	**May 19, 2000**
Title	:	**OPTICAL RECORDING MEDIUM HAVING AT LEAST TWO RECORDABLE LAYERS**
Examiner	:	**Brian E. Miller**
Art Unit	:	**2652**

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Patricia A. Verlangieri

APPELLANTS' BRIEF UNDER 37 C.F.R. § 1.192

On June 29, 2004, Appellants filed a timely Notice of Appeal (that was received in the United States Patent and Trademark Office on June 29, 2004) from the action of the Examiner finally rejecting pending claims 1-2 and 6-9. The Appellants herein file this Brief in accordance with 37 C.F.R. § 1.192.

1. IDENTIFICATION OF THE REAL PARTY IN INTEREST

The real party in interest for the above-identified application is Thomson Inc., which is the assignee of the assignee of record for this application, Deutsche Thomson-Brandt GmbH.

2. IDENTIFICATION OF RELATED APPEALS OR INTERFERENCES

To the best of the appellants' knowledge, there are no appeals or interferences that will be directly affected by, or will have a bearing on the decision of this appeal.

3. STATUS OF THE CLAIMS

The above-identified patent application was filed on May 19, 2000 claiming priority under 35 U.S.C. § 119 to German Patent Application No. 199 23 542.2 filed May 21, 1999. Claims 1-18 were pending.

In a first Office Action, mailed March 1, 2002 (Paper No. 7), claims 1-18 were subject to restriction pursuant to 35 U.S.C. § 121.

In appellants' response to the first Office Action, dated June 3, 2002, claims 1-9 were elected for prosecution. Claims 10-18 were withdrawn as being directed to a non-elected invention.

A second Office Action was mailed August 22, 2002 (Paper No. 10), in which claims 1-6 and 8-9 were rejected and claim 7 was objected to.

In appellants' response to the second Office Action, dated January 22, 2003, claims 3-4 and 7 were amended.

A third Office Action was mailed April 8, 2003 (Paper No. 13), in which the Examiner noted that a non-amended portion of claim 7 was not commensurate with its previous version.

In appellants' response to the third Office Action, dated April 25, 2003, claim 7 was amended.

A fourth Office Action was mailed July 16, 2003 (Paper No. **16**), in which claim 1-9 were rejected.

In appellants' response to the fourth Office Action, dated November 6, 2003, claims 1-2, 4-5, 7 and 9 were amended.

The Examiner in a fifth Office Action, mailed January 29, 2004 (Paper No. **18**), finally rejected claims 1-2 and 6-9. Claims 4-5 were allowed and claim 3 was objected to.

The status of the claims is as follows:

Thrice amended claim 7. Twice amended claim 4. Once amended claims 1-3, 5 and 9. Original claims 6 and 8. A copy of the claims, as amended, is attached as Appendix A. Claims 1-2 and 6-9 stand finally rejected.

4. STATUS OF THE AMENDMENTS

No amendments were made to the claims after final rejection. All amendments were entered.

5. SUMMARY OF THE INVENTION

Appellant's invention, as set forth in independent claim 1, is directed to an optical recording medium **1**. See appellant's specification at FIG. 1 and page 9, lines 8-9. The optical recording medium 1 includes at least two information carrier layers 2, 3, a separating layer 8 and transparent covering layers 4,5. See appellant's specification at FIG. 1 and page 9, lines 9-15. The separating layer 8 is arranged between the at least two information carrier layers 2, 3. See appellant's specification at FIG. 1 and page 9, lines 12-15. The transparent covering layers 4, 5 are arranged between each information carrier layer 2, 3 and a surface of the recording medium 1. See appellant's specification at FIG. 1 and

page 9, lines 10-12. Each information carrier layer 2, 3 is semi-transparent. See appellant's specification at page 10, lines 34-37.

Appellant's invention, as set forth in independent claim 7, is also directed to an optical recording medium 1. See appellant's specification at FIG. 1 and page 9, lines 8-9. The optical recording medium 1 includes two information carrier layers 2, 3, a separating layer 8 and transparent covering layers 4,5. See appellant's specification at FIG. 1 and page 9, lines 9-15. The separating layer 8 is arranged between the at least two information carrier layers 2, 3. See appellant's specification at FIG. 1 and page 9, lines 12-15. The transparent covering layers 4, 5 are arranged between each information carrier layer 2, 3 and a surface of the recording medium 1. See appellant's specification at FIG. 1 and page 9, lines 10-12. Each information carrier layer 2, 3 is semi-transparent. See appellant's specification at page 10, lines 34-37. The transmission factor of each information carrier layer is less than 10 %. See appellant's specification at page 4, lines 12-18.

6. ISSUES

The issue on appeal is:

1. Whether appellant's claims 1-2 and 6-9 are anticipated by U. S. Patent No. 5,703,868 to Kobayashi et al. (Kobayashi hereinafter).

7. GROUPING OF CLAIMS

Each of appellant's finally rejected claims 1-2 and 6-9 stands alone.

8. ARGUMENT

1. Claims 1-2 and 6-9 are not anticipated by Kobayashi

Kobayashi describes an optical information recording medium. See Kobayashi at column 1, lines 8-10. The optical information recording medium includes a first substrate 22 having a first information recording face 23 upon which information is recorded. See Kobayashi at FIG. 3 and column 8, lines 62-63. The first information recording face 23 is covered by a semi-transparent layer 24. See Kobayashi at FIG. 3 and column 8, lines 64-65. A second substrate 29 has a third information recording face 30 that is covered by a second semi-transparent layer 31. See Kobayashi at FIG. 3 and column 9, lines 16-19.

In appellant's independent claim 1, an optical recording medium 1 is described. See appellant's specification at FIG. 1 and page 9, lines 8-9. The optical recording medium 1 includes at least two information carrier layers 2, 3, a separating layer 8 and transparent covering layers 4,5. See appellant's specification at FIG. 1 and page 9, lines 9-15. The separating layer 8 is arranged between the at least two information carrier layers 2, 3. See appellant's specification at FIG. 1 and page 9, lines 12-15. The transparent covering layers 4, 5 are arranged between each information carrier layer 2, 3 and a surface of the recording medium 1. See appellant's specification at FIG. 1 and page 9, lines 10-12. Each information carrier layer 2, 3 is semi-transparent. See appellant's specification at page 10, lines 34-37.

Kobayashi does not describe or suggest an optical recording medium including at least two semi-transparent information carrier layers. Rather, Kobayashi teaches a completely different arrangement wherein first and second recording faces of first and second substrates are covered with semi-transparent layers. Since Kobayashi does not teach use of an optical recording medium including at least two semi-transparent information carrier layers, claim 1 is patentable over Kobayashi.

Claim 2 depends from claim 1 and recites a limitation that each information carrier layer can be read from both sides but can be written to from only one side. See appellant's specification at page 3, lines 10-32.

Kobayashi does not describe or suggest an optical recording medium including at least two semi-transparent information carrier layers that can be read from both sides but can be written to from only one side. Rather, Kobayashi teaches a completely different arrangement wherein first and second recording faces of first and second substrates are covered with semi-transparent layers. Since Kobayashi does not teach use of an optical recording medium including at least two semi-transparent information carrier layers that can be read from both sides but can be written to from only one side, claim 2 is patentable over Kobayashi.

Claim 6 depends from claim 1 and recites a limitation that the separating layer has at least one further information carrier layer. See appellant's specification at page 4, lines 3-12.

Kobayashi does not describe or suggest an optical recording medium including at least two semi-transparent information carrier layers separated by a separating layer where the separating layer has at least one further information carrier layer. Rather, Kobayashi teaches a completely different arrangement wherein first and second recording faces of first and second substrates are covered with semi-transparent layers. Since Kobayashi does not teach use of an optical recording medium including at least two semi-transparent information carrier layers separated by a separating layer where the separating layer has at least one further information carrier layer, claim 6 is patentable over Kobayashi.

In appellant's independent claim 7, an optical recording medium 1 is described. See appellant's specification at FIG. 1 and page 9, lines 8-9. The optical recording medium 1 includes two information carrier layers 2, 3, a separating layer 8 and transparent covering layers 4,5. See appellant's specification at FIG. 1 and page 9, lines 9-15. The separating layer 8 is arranged between the at least two information carrier layers 2, 3. See appellant's

specification at FIG. 1 and page 9, lines 12-15. The transparent covering layers 4, 5 are arranged between each information carrier layer 2, 3 and a surface of the recording medium 1. See appellant's specification at FIG. 1 and page 9, lines 10-12. Each information carrier layer 2, 3 is semi-transparent. See appellant's specification at page 10, lines 34-37. The transmission factor of each information carrier layer is less than 10 %. See appellant's specification at page 4, lines 12-18.

Kobayashi does not describe or suggest an optical recording medium including at least two semi-transparent information carrier layers where the transmission factor of each information carrier layer is less than 10 %. Rather, Kobayashi teaches a completely different arrangement wherein first and second recording faces of first and second substrates are covered with semi-transparent layers. Since Kobayashi does not teach use of an optical recording medium including at two semi-transparent information carrier layers where the transmission factor of each information carrier layer is less than 10 %, claim 7 is patentable over Kobayashi.

Claim 8 depends from claim 1 and recites a limitation that the information carrier layers are write-once layers. See appellant's specification at page 4, lines 19-27.

Kobayashi does not describe or suggest an optical recording medium including at least two semi-transparent information carrier layers that are write-once layers. Rather, Kobayashi teaches a completely different arrangement wherein first and second recording faces of first and second substrates are covered with semi-transparent layers. Since Kobayashi does not teach use of an optical recording medium including at least two semi-transparent information carrier layers that are write-once layers, claim 8 is patentable over Kobayashi.

Claim 9 depends from claim 1 and recites a limitation that the writable information carrier layers have preformatted tracks the rotational sense of each track viewed from the same side is unidirectional and opposed. See appellant's specification at page 4, line 28 to page 5, line 21.

Kobayashi et al. does not describe or suggest an optical recording medium including at least two semi-transparent information carrier layers that have preformatted tracks the rotational sense of each track viewed from the same side is unidirectional and opposed. Rather, Kobayashi teaches a completely different arrangement wherein first and second recording faces of first and second substrates are covered with semi-transparent layers. Since Kobayashi does not teach use of an optical recording medium including at least two semi-transparent information carrier layers that have preformatted tracks the rotational sense of each track viewed from the same side is unidirectional and opposed, claim 9 is patentable over Kobayashi.

In view of the foregoing arguments, appellants respectfully request that the Examiner's rejection of claims 1-2 and 6-9 be reversed. Favorable action is respectfully requested.

Respectfully submitted,

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APPENDIX A - CLAIMS

1. Optical recording medium comprising at least two information carrier layers, on which information can be written by means of a focused light beam, a separating layer arranged between said information carrier layers, and a transparent covering layer, which is arranged between said information carrier layer and a surface of the recording medium and whose thickness substantially exceeds that of said information carrier layer, wherein each information carrier layer is semi-transparent.

2. Optical recording medium according to claim 1, wherein each information carrier layer can be read from both sides, but can be written to from only one side in each case.

3. Optical recording medium according to claim 2, wherein the total transmission factor of an information carrier layer with associated covering layer and separating layer is lower than the lowest transmission factor that allows to pass through said information carrier layer with associated covering layer and separating layer a quantity of light being sufficient for a writing operation on the other information carrier layer.

4. Optical recording medium comprising two information carrier layers, on which information can be written by means of a focused light beam, a separating layer arranged between said information carrier layers, and a transparent covering layer, which is arranged between said information carrier layer and a surface of the recording medium and whose thickness substantially exceeds that of said information carrier layer, wherein both information carrier layers are semi-transparent, wherein the total transmission factor of an information carrier layer with associated covering layer and separating layer is lower than the lowest transmission factor that allows to pass through said information carrier layer with

associated covering layer and separating layer a quantity of light being sufficient for a writing operation on the other information carrier layer.

5. Optical recording medium according to claim 4, wherein the transmission factor of each information carrier layer is less than 10 %.

6. Optical recording medium according to claim 1, wherein the separating layer (8) has at least one further information carrier layer.

7. Optical recording medium comprising two information carrier layers, on which information can be written by means of a focused light beam, a separating layer arranged between said information carrier layers, and a transparent covering layer, which is arranged between said information carrier layer and a surface of the recording medium and whose thickness substantially exceeds that of said information carrier layer, wherein both information carrier layers are semi-transparent and wherein the transmission factor of each of said two information carrier layers is less than 10 %.

8. Optical recording medium according to claim 1, wherein the information carrier layers are write-once layers.

9. Optical recording medium according to claim 1, wherein the writable information carrier layers have a preformatted track, the rotational sense of each track, viewed from the same side, is unidirectional, and whose directional sense is one of unidirectional and opposed.